

BRIEF NOTE

Between “Voluntary Migrants” and War Refugees: The Health of the Shan Burmese Migrant Workers in Northern Thailand

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The Shan are a large migrant group from Burma (Myanmar) found within Thailand. While some Shan migrate to escape the civil war within Burma, others migrate for economic opportunity. Despite the size of this population, little is known about their health. Our study highlights the need for expanded access to primary care among this Shan population. Despite the arduous and trying journeys of these Shan migrants, they do not display the level of health sometimes attributed to health selection among immigrant groups.

KEYWORDS *Shan, healthy immigrant effect, Burmese refugees, Thailand*

The Shan are one of the largest ethnic groups in Burma (Myanmar; Beyrer, 2001; U.S. Committee for Refugees, 2008). They have been engaged in an on and off decades-long armed conflict with Burma’s military junta resulting in the displacement of at least 300,000 Shan Burmese into neighboring Thailand (Carl Grundy-Warr, 2002; Risser, Kher, & Htun, 2003; Suwanvanichkij, 2008). The Thai government generally does not recognize the Shan as a refugee group, and virtually all Shan in Thailand live outside of refugee camps.

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Very little is known about their health and well-being (U.S. Committee for Refugees, 2008; Lang, 2002).

The Shan are subject to violence and persecution in Burma, but they also flee Burma in search of economic security (Green-Rauenbsen, Jacobsen, & Pyne, 2008; Mirante, 1989; Su & Muennig, 2005; Suwanvanichkij, 2008). This distinction between war refugee and economic migrant is important because immigrant groups, including low-income undocumented immigrants, are often healthier than the native-born population of their host countries, a phenomenon called the “healthy immigrant effect” (Muennig & Fahs, 2002; Singh & Miller, 2004; Chen, Ng, & Wilkins, 1996). War refugee populations, on the other hand, tend to be marred by more health problems than native-born populations and generally require much more intensive medical and psychosocial interventions (Burnett & Peel, 2001; Duong, Bohannon, & Ross, 2001; Muennig, Pallin, Sell, & Chan, 1999; Munger, Gomez-Marin, Prineas, & Sinaiko, 1991).

Since little is known about the basic health needs of the Shan, we set out to quantitatively measure the health status of two Shan communities and qualitatively explore their motives for migrating and their experiences within Burma.

METHODS

Overview

We studied two Shan communities residing in Northern Thailand comprised of families from a single town within Burma called Lankur. The communities have been receiving basic public health and education services from a small nongovernmental organization, the Burmese Refugee Project, for over 9 years. However, medical care has historically only been provided on an “as needed” basis.

We administered a detailed verbal questionnaire to, and conducted basic medical screening examinations on, a sample of 51 adults of the two communities under survey. Semistructured interviews were conducted over 4 years from 2005–2009 on a convenience sample of nine adults. Medical interview and examination surveys were conducted over four visits to the community in 2008, and were administered by a medical student and a public health student from Columbia University with Institutional Review Board approval.

The medical survey had two components: (a) a general health and sociodemographic profile and (b) a medical examination component consisting of height, weight, waist circumference, and three consecutive blood pressure readings. The general demographics of the cohort are described in Table 1.

Semistructured interviews were conducted to obtain qualitative data on the subjects’ experiences both in Burma as well as during immigration

TABLE 1 Basic Demographic Characteristics of the Two Shan Communities Under Study. Values are Presented Separately for Males, Females, and For Both Combined

	Males (<i>n</i> = 18)		Females (<i>n</i> = 33)		Total (<i>n</i> = 51)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Age						
18–24	1	5.6	3	9.1	4	7.8
25–34	2	11.1	9	27.3	11	21.6
35–44	10	55.6	14	42.4	24	47.1
45–54	4	22.2	5	15.2	9	17.6
>55	1	5.6	2	6.1	3	5.9
Education						
None	13	72.2	27	81.8	40	78.4
≤6 years	4	22.2	6	33.3	10	19.6
6–12 years	1	5.6	0	0.0	1	2.0
Languages spoken						
Shan only	8	44.4	13	39.4	21	41.2
Thai	10	55.6	17	51.5	27	52.9
Other ^a	2	3.9	3	9.7	5	9.8
Literacy*						
None	6	33.3	24	72.7	30	58.8
Shan only	8	44.4	3	9.1	11	21.6
Thai	3	16.7	2	6.1	5	9.8
Other	1	5.6	4	12.1	5	9.8
Abdominal obesity*	0	0.0	22	66.7	22	43.1
Obesity class*						
BMI < 18.5	1	5.6	1	3.0	2	3.9
18.5 < BMI < 23	14	77.8	12	36.4	26	51.0
23 ≤ BMI < 25	3	16.7	7	21.2	10	19.6
25 ≤ BMI < 30	0	0.0	10	30.3	10	19.6
30 ≤ BMI < 35	0	0.0	2	6.1	2	3.9
BMI ≥ 35	0	0.0	1	3.0	1	2.0
Pre hypertension	6	33.3	11	33.3	17	33.3
Hypertension	6	33.3	6	18.2	12	23.5
Previous hypertension diagnosis	3	16.7	4	12.2	7	13.7
Treatment for hypertension	0	0.0	0	0.0	0	0.0
Controlled hypertension	0	0.0	0	0.0	0	0.0
Smoke daily*	10	55.6	3	9.1	13	25.5
Drink daily*	14	77.8	1	3.0	15	29.4
Alcohol amount*						
0 g/day	1	5.6	26	78.8	27	52.9
Men: 0–39 g/day						
Women: 0–19 g/day	15	83.3	7	21.2	22	43.1
Men: 40–59 g/day						
Women: 20–39 g/day	2	11.1	0	0.0	2	3.9
Alcohol type*						
None	3	16.7	25	75.8	28	54.9
Beer	1	5.6	7	21.2	8	15.7
Whiskey	14	77.8	1	3.0	15	29.4
Binge drinking*	5	27.8	0	0.0	5	9.8

^aBurmese or Lisu, a hilltribe language.

*Indicates a significant difference between males and females by Fisher's Exact Test ($p < .05$).

to Thailand using open-ended questions such as, “What was life like in Burma?” and “Please describe your journey to Thailand.” This subsample was not meant to be representative; rather, these interviews were designed to help analyze questionnaire data in the context of larger migration patterns.

Definitions

Abdominal obesity was defined as a waist circumference ≥ 80 cm for women and ≥ 90 cm for men. Blood pressure was based on an average of the three measurements and Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7) criteria were used to define hypertension [systolic blood pressure (SBP) ≥ 140 mm Hg or diastolic blood pressure (DBP) ≥ 90 mm Hg] and prehypertension ($120 \leq \text{SBP} < 140$ mm Hg or $80 \leq \text{DBP} < 90$ mm Hg; Chobanian et al., 2003]. Individuals told by a health professional that they had hypertension were considered to have a previous diagnosis and anyone taking blood pressure medications within the last 2 weeks was considered to be on therapy. Class I obesity is defined as ≤ 25 BMI < 30 and Class II is defined as BMI ≥ 30 (Aekplakorn, et al., 2007). Binge drinking was defined as consuming, in one sitting, > 8 glasses of whiskey, $> 1/2$ bottle of local whiskey, or > 4 cans or 2.5 large bottles of beer (Aekplakorn et al., 2008b).

We conducted linear regression analyses with continuous and clinically meaningful dichotomous variables to explore whether traditional risk factors were predictors of hypertension (yes/no), body mass index (> 20 , ≤ 20), daily smoking (yes/no), and daily drinking (yes/no). The predictors included age (continuous), gender (male or female), income (continuous), literacy (yes/no for any language), languages spoken (Thai or other), and, depending on the analysis, the relevant aforementioned dependent variables.

Finally, we compared mean values for hypertension, prehypertension, and abdominal obesity with Thai norms from the National Health Examination Survey (NHES) III stratified over two age intervals (15–44 and 45+) using the two sample Z tests for proportions (Aekplakorn et al., 2008a; Aekplakorn et al., 2007; Aekplakorn et al., 2008b).

RESULTS

Qualitative Interviews

The semistructured qualitative interviews revealed a few recurring themes. All interviewees cited the stable Thai economy and increased financial opportunity as one reason for their migration. None of the subjects were actively involved in firefights or admitted to being raped; however, all were forced to carry munitions at gunpoint, to give a significant portion of their earnings

to Burmese soldiers, or both. Some were also forced to give food or money to Shan rebel armies.

All interviewees migrated through foreboding terrain that ranged from jungle to cold mountain passes. Many migrated with insufficient food and water, and cited relying on provisions from Thai soldiers or hill tribe dwellers for survival. Subjects arrived in the community through social ties with friends and family from Lankur, Burma.

Medical Examination Data

Table 1 documents the basic background characteristics of the cohort. Of the respondents, 18 were male and 33 were female. Of the sample, 55.6% were in the 35–44 age category. A mere 22% had any formal education, and 41% spoke only Shan. Nevertheless, 41% reported some literacy (the ability to sign one's name) in at least one language.

Approximately 43% of the population had abdominal obesity. When measured as BMI, 20% were overweight, 3.9% were obese, and 2% were severely obese. All overweight and obese persons were female. Conversely, 3.9% were underweight (1 male, 1 female).

Among males, 33.3% had prehypertension, and 33.3% met the criterion for hypertension. Among females, the numbers were 33.3% and 18.2%, respectively. Of these, 16.7% of males and 12.2% of females were previously told that they had hypertension, and none were receiving treatment for the condition.

This hypertension may arise in part from high rates of smoking and drinking, with 56% of males smoking daily and 78% drinking daily (83% moderately and 11% heavily). A full 28% of males report binge drinking. Among females, the numbers were 9.1% for those smoking daily, and 3% for those drinking daily.

CONCLUSIONS

These two small communities of Shan in Northern Thailand had a high prevalence of prehypertension or hypertension, overweight or obesity, smoking, and alcoholism. Our findings highlight the need for expanded access to primary and preventative care services amongst the Shan.

Our findings also provide data on some dynamics of the healthy immigrant effect in the Burmese–Thai context. In many ways, the Shan are similar to other low-income immigrant groups. Their experiences are not unlike that of Mexican immigrants to the United States, who have unusually low rates of mortality from conditions associated with hypertension, obesity, or behavioral risk factors (Muennig & Fahs, 2002; Singh & Miller, 2004; Singh & Siahpush, 2002).

Conventional wisdom holds that only the healthiest of Latin American immigrants can make the arduous journey to the United States and, therefore, such immigrants tend to be healthy despite their poor living conditions within the United States (Abraido-Lanza, Dohrenwend, Ng-Mak, & Turner, 1999). Our data suggest that it is possible to have poor health indicators despite heavy selection pressure.

War refugee populations resettled in industrializing nations have little choice but to travel while sick, and tend to have a range of poor health indicators (Burnett & Peel, 2001; Duong et al., 2001; Munger et al., 1991). Like most refugee populations, the Shan we interviewed had psychologically traumatic experiences.

It is plausible that the traumatic experiences of the Shan lead to a deterioration in their physical health status. Chronic stress can cause disruptions in autonomic activity, which in turn can lead to hypertension or other chronic medical conditions (McEwen, 1998). In addition, voluntary immigrants may be better prepared for the stresses associated with living in a foreign country. Some studies suggest that immigrants to the United States who live in enclave communities have high levels of social capital, which can act as a buffer to immigration-related stressors (Hagan, Macmillan, & Wheaton, 1996; Sanders & Nee, 1996).

Our study's primary limitation was the small sample size, which limited the conclusions that we might draw surrounding predictors of the relevant health outcomes and our ability to compare Shan norms with Thai norms. Our data were also limited by self-report data on behavioral risk factors and lack of mortality as an endpoint. Finally, our sample may not be generalizable to other Shan populations living in Thailand. Our population is atypical in that it has been receiving basic public health services from a small non-governmental organization for 8 years. Generalizability is also affected by the fact that most community members come from a single town within Shan state in Burma.

We find that the Shan in our sample have a much higher prevalence of chronic disease risk factors than one would expect of an immigrant enclave. While basic public health and education interventions serve as the foundation for any non-governmental activities, this study highlights the need for additional measures, including behavioral risk factor counseling. Many Shan Burmese communities in Thailand are far from refugee camps or provincial capitals (Lang, 2002). Thus, policy implications might also include greater outreach by international aid agencies and nongovernmental organizations to remote Shan communities.

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